

SABIC® PPcompound 19T1040

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Saudi Basic Industries Corporation (SABIC)

Product Texts

SABIC® PPcompound 19T1040 is a 40% talc-filled polypropylene homopolymer. The material's high fill grade makes for a very high stiffness. This combined with the high flow and good thermal stabilization makes it especially suited for complex injection molded applications requiring a very high modulus and high thermal stability. SABIC® PPcompound 19T1040 is a designated automotive grade. IMDS ID: 16488039

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt flow index, MFI	18	g/10min	ISO 1133
Temperature	230	°C	-
Load	2.16	kg	-

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	3600	MPa	ISO 527
Yield stress	30	MPa	ISO 527
Yield strain	2.3	%	ISO 527
Stress at break	24	MPa	ISO 527
Strain at break	11	%	ISO 527
Flexural modulus, 23°C	3600	MPa	ISO 178
Charpy notched impact strength, +23°C	3	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C	1	kJ/m ²	ISO 179/1eA
Izod notched impact strength	1.5	kJ/m ²	ISO 180/1A
ASTM Data			
Tensile Modulus	3990	MPa	ASTM D 638
Tensile Strength at Yield	32	MPa	ASTM D 638
Tensile Strength at Break	28	MPa	ASTM D 638
Elongation at Yield	3	%	ASTM D 638
Elongation at Break	6.7	%	ASTM D 638
Flexural Modulus	3600	MPa	ASTM D 790
Shore D Hardness	75	-	ASTM D 2240

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	89	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	130	°C	ISO 75-1/-2
Vicat softening temperature, A	150	°C	ISO 306
ASTM Data			
DTUL @ 66 psi	134	°C	ASTM D 648
DTUL @ 264 psi	78	°C	ASTM D 648

Other properties	Value	Unit	Test Standard
Density	1250	kg/m ³	ISO 1183
Density	1260	kg/m ³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	80 - 100	°C	-
Pre-drying - Time	2 - 4	h	-
Melt temperature	210 - 270	°C	-
Mold temperature	15 - 60	°C	-
Zone 1	190 - 230	°C	-
Zone 2	200 - 250	°C	-
Zone 3	210 - 270	°C	-
Nozzle temperature	210 - 270	°C	-
Back pressure	1 - 1.5	MPa	-

Characteristics

Processing

Injection Molding

Features

Homopolymer